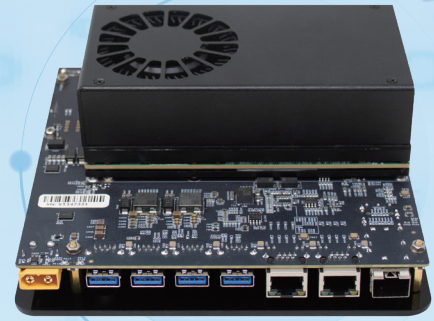


# 301-DEV Developer Kits



## Key Feature

- AI Performance: 176 TOPS INT8
- Memory & Storage: 48GB LPDDR4X, 128GB eMMC
- Rich I/O Interfaces: 2 × RJ45, 1 × FC, 4 × USB3.0 Type-A, 1 × RTC, 4 × GPIO, 4 × CAN
- Expansion Slots: miniPCle, M.2 M-Key 2280/2242, M.2 B-Key 3050, Nano SIM
- Operating Temperature: -40°C ~ +65°C
- Input Voltage: DC 9V ~ 36V

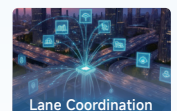
## Introduction

301-DEV is an industrial-grade edge AI development kit. Its core is equipped with the Ascend 310P, delivering 176 TOPS INT8 AI compute.

It supports mainstream deep learning frameworks such as PyTorch and TensorFlow, providing developers with a full-process support from model training, optimization, deployment to real-time inference, accelerating the transition of edge AI applications from prototype verification to large-scale implementation.



Website



## Specifications

Module	AI310SM module (Ascend 310P)
AI Compute	176 TOPS INT8
CPU	ARMv8.2 16core TaishanV200M@max. 1.9 GHz
Memory	48GB LPDDR4X
Storage	128G EMMC
Encode/Decode	Video Encoder: 24x 1080P@30fps/3x 4K@60fps (H.264/H.265) Video Decoder: 96x 1080P@30fps/12x 4K@60fps (H.264/H.265) JPEG Encoder: 4K@192fps (FHD@1024fps) JPEG Decoder: 4K@384fps (FHD@2048fps) supports up/down scaling, crop, chroma up/down sampling, color space conversion (FHD 4320FPS)
USB	4x USB 3.0 Type-A
Networking	6x Gigabit network (2x RJ45+ 3x 16pin Header+ 1x FC )
Button	Select 4 startup methods via the J60 jumper wire、1.EMMC 2.PXE FTP 3.SATA 4.NVME
Expansion	2x miniPCIe、1x M.2 KEY M(2280)、1x M.2 KEY M(2242)、1x M.2 KEY B(3050)、1x Nano SIM
Functional Signals	4xCAN, 2xSPI, 2xIIC, 4xGPIO
Serial Ports	4x UART
Temperature	-40°C~+65°C
Dimensions	170mm*170mm*73mm
Input Voltage	DC 9V-36V
Weight	1000g
OS	RC
Power	<140W

## Interfaces

